

Notice of Allowability**Application No.**

10/581,773

Examiner

ZACHARY SKELDING

Applicant(s)

STAUSS ET AL.

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11-9-10.
2. ☒ The allowed claim(s) is/are 12-19 and 28-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20110113.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☒ Other 1 page email and 3 pages of email attachment (clean copy claims).

/Zachary Skelding/
Primary Examiner, Art Unit 1644

EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on January 13, 2011, applicant's representative Lynn Janulis requested an extension of time for 3 MONTH(S) and authorized the Director to charge Deposit Account No. 13-2855 the required fee of \$1,110 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's representative Ms. Janulis on January 13, 2011.

1. The application has been amended as follows:

IN THE CLAIMS

2. Claims 20-22, 25, 31 and 32 have been canceled.
3. Claims 12-19 and 28-30 have been replaced with the following rewritten claims:

12. An isolated polynucleotide encoding a T cell receptor (TCR) alpha chain portion containing three alpha complementarity determining regions (CDRs):

CDR1 α : SSYSPS (SEQ ID NO: 2);

CDR2 α : YTSAATL (SEQ ID NO: 3); and

CDR3 α : SPFSGGGADGLT (SEQ ID NO: 5),

wherein a TCR molecule containing the TCR alpha chain portion encoded by said polynucleotide and a TCR beta chain portion containing three beta CDRs:

CDR1 β : DFQATT (SEQ ID NO: 6);

CDR2 β : SNEGSKA (SEQ ID NO: 7); and

CDR3 β : RDGGEGSETQY (SEQ ID NO: 9)

has affinity for an HLA-A2/RMFPNAPYL (SEQ ID NO: 1) complex.

13. An isolated polynucleotide encoding a T cell receptor (TCR) beta chain portion containing three beta complementarity determining regions (CDRs):

CDR1 β : DFQATT (SEQ ID NO: 6);
CDR2 β : SNEGSKA (SEQ ID NO: 7); and
CDR3 β : RDGGEGSETQY (SEQ ID NO: 9),

wherein a TCR molecule containing the TCR beta chain portion encoded by said polynucleotide and a TCR alpha chain portion containing three alpha CDRs:

CDR1 α : SSYSPS (SEQ ID NO: 2);
CDR2 α : YTSAATL (SEQ ID NO: 3); and
CDR3 α : SPFSGGGADGLT (SEQ ID NO: 5)

has affinity for an HLA-A2/RMFPNAPYL (SEQ ID NO: 1) complex.

14. An isolated polynucleotide encoding a single chain T cell receptor (TCR) molecule containing an alpha chain portion and a beta chain portion,

wherein the alpha chain portion contains three complementarity determining regions (CDRs):

CDR1 α : SSYSPS (SEQ ID NO: 2);
CDR2 α : YTSAATL (SEQ ID NO: 3); and
CDR3 α : SPFSGGGADGLT (SEQ ID NO: 5),
and wherein the beta chain portion contains three CDRs:

CDR1 β : DFQATT (SEQ ID NO: 6);
CDR2 β : SNEGSKA (SEQ ID NO: 7); and
CDR3 β : RDGGEGSETQY (SEQ ID NO: 9),

wherein the TCR molecule encoded by said polynucleotide has affinity for an HLA-A2/ RMFPNAPYL (SEQ ID NO: 1) complex.

15. An expression vector comprising the polynucleotide according to any one of claims 12 to 14.

16. The expression vector according to claim 15 which is a retroviral vector.

17. A host cell comprising the polynucleotide according to any one of claims 12 to 14.

18. The host cell according to claim 17 which is a T cell.
19. The host cell according to claim 18 which is a T cell derived from a patient.
28. A host cell comprising the expression vector according to claim 15.
29. The host cell according to claim 28 which is a T cell.
30. The host cell according to claim 28 which is a T cell derived from a patient.

Conclusion

4. Claims 12-19 and 28-30 are allowed.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZACHARY SKELDING whose telephone number is (571)272-9033. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Zachary Skelding/
Primary Examiner, Art Unit 1644